



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,994	11/05/2003	Michael Mallary	3123-529(16420-02116)	6624
23392	7590	04/30/2007		
FOLEY & LARDNER 2029 CENTURY PARK EAST SUITE 3500 LOS ANGELES, CA 90067			EXAMINER BLOUIN, MARK S	
			ART UNIT	PAPER NUMBER
			2627	
			MAIL DATE	DELIVERY MODE
			04/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/701,994

Applicant(s)

MALLARY ET AL.

Examiner

Mark Blouin

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,8-13,17,18,30-35,39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8-11,13,17,18,30-33,35,39 and 40 is/are rejected.
- 7) ☒ Claim(s) 12 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Detailed Action

Response to Amendment

- The reply filed on January 19, 2007 was applied to the following effect: Claims 3-7, 14-16, 19-29, and 36-38 are withdrawn.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 8-11, 13, 17, 18, 30-33, 35, 39, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen et al (US 6,809,899).
3. Regarding Claims 1, 13, and 30, Chen et al shows (Figs. 4-8) a read/write head for a disk drive, the head being suitable for recording data in adjacent magnetic recording media, the media including a first layer for recording data and a second layer that is a soft underlayer (SUL) to return magnetic flux to the read/write head, the head comprising: a substrate (material to the right of write pole (113) in Figure 5); a write pole (113) formed proximate to the substrate, the write pole having a magnetic via section (117); a write shield (118) formed proximate to the write pole and located on an opposite side of the write pole from the substrate, the write shield (118) being magnetically connected to the magnetic via section (117) of the write pole; a first read shield (105) proximate to the write shield and located on an opposite side of the write shield from the substrate; a second read shield (125) proximate to the first read shield and located on an opposite side of the first read shield from the write pole; a magnetoresistive sensor (122)

located between the first and second read shields; and, wherein the first read shield is magnetically connected to the write pole.

4. Regarding Claim 2 and 31-33, Chen et al shows (Figs. 4-8) a read/write head, further including a write coil (120) that coils around the magnetic via section (117 - part of write element), wherein the write coil is a pancake (flat) coil, wherein there are no other write coils.

5. Regarding Claims 8-11, Chen et al shows (Figs. 4-8) a read/write head, wherein the read element includes a pair of read shields (105 and 125) and the write element includes a write pole (113) and a write shield (118) that is magnetically connected to the write pole, wherein the write element includes a coil (120) that coils around a portion of the write element (117) that connects the write shield to the write pole, wherein the write coil is a pancake (flat) coil, wherein there are no other write coils.

6. Regarding Claims 17 and 39, Chen et al shows (Figs. 4-8) a read/write head, wherein the adjacent magnetic recording media is caused to move relative to the read/write head in a direction that causes a given portion of media to pass first by the write pole and then by the magnetoresistive sensor (arrow 139).

7. Regarding Claims 18 and 40, Chen et al shows (Figs. 4-8) a read/write head, wherein the head is configured to perpendicularly record data in the first layer (130) of the adjacent magnetic recording media (102).

8. Regarding Claim 35, Chen et al shows (Figs. 4-8) a read/write head, wherein the write pole (113) is formed directly on the substrate (material to the right of write pole (113) in Figure 5).

Allowable Subject Matter

9. Claims 12 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments with respect to claims 1,2,8-11,13,17,18,30-35,39, and 40 filed on October 16, 2006 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is 571-272-7583. The examiner can normally be reached on M-F from 6:00 to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen, can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Blouin
Patent Examiner
Art Unit 2627
April 17, 2007

